

What is claimed is:

1. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:
  - a) an amino acid sequence of SEQ ID NO:1 and SEQ ID NO:3,
  - b) a naturally-occurring amino acid sequence having at least 85% sequence identity to the sequence of SEQ ID NO:1 or SEQ ID NO:3,
  - c) a biologically-active fragment of the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3, and
  - d) an immunogenic fragment of the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:3.
2. An isolated polypeptide of claim 1, selected from the group consisting of an amino acid sequence of SEQ ID NO:1 and SEQ ID NO:3.
3. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:1.
4. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:3.
5. A composition comprising a polypeptide of claim 1 and an acceptable excipient.
6. A composition of claim 5, wherein the polypeptide has the sequence selected from the group having the sequence of SEQ ID NO:1 and SEQ ID NO:3.
7. A method for producing a polypeptide of claim 1, the method comprising:
  - a) culturing a cell under conditions suitable for expression of the polypeptide, wherein the cell is transformed with a recombinant polynucleotide, and the recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 1, and
  - b) recovering the polypeptide so expressed.
8. The method of claim 7, wherein the polypeptide is selected from the group consisting of an amino acid sequence of SEQ ID NO:1 and SEQ ID NO:3.
9. A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 1, the method comprising:
  - a) exposing a sample comprising a polypeptide of claim 1 to a compound, and
  - b) detecting agonist activity in the sample.
10. A method for screening a compound for effectiveness as an antagonist of a

polypeptide of claim 1, the method comprising:

- a) exposing a sample comprising a polypeptide of claim 1 to a compound, and
  - b) detecting antagonist activity in the sample.
11. A method of preparing a polyclonal antibody comprising:
- a) immunizing an animal with a polypeptide of claim 1 under conditions to elicit an antibody response;
  - b) isolating antibodies from the animal; and
  - c) screening the isolated antibodies with the polypeptide thereby identifying a polyclonal antibody which binds specifically to a polypeptide of claim 1.
12. An antibody produced by a method of claim 11.
13. A composition comprising the antibody of claim 12 and a suitable carrier.
14. A method of making a monoclonal antibody comprising:
- a) immunizing an animal with a polypeptide of claim 1 under conditions to elicit an antibody response;
  - b) isolating antibody producing cells from the animal;
  - c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells;
  - d) culturing the hybridoma cells; and
  - e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide of claim 1.
15. A monoclonal antibody produced by a method of claim 14.
16. A composition comprising the antibody of claim 15 and a suitable carrier.
17. An isolated antibody which specifically binds to a polypeptide of claim 1.
18. The antibody of claim 17, wherein the antibody is produced by screening a Fab expression library.
19. The antibody of claim 17, wherein the antibody is produced by screening a recombinant immunoglobulin library.
20. A method for detecting a polypeptide in a sample comprising the steps of:
- a) incubating the antibody of claim 17 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and

- b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide.
21. A method of purifying a polypeptide from a sample, the method comprising:
- incubating the antibody of claim 17 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and
  - separating the antibody from the sample and obtaining purified polypeptide.
22. A diagnostic test for a condition or disease associated with the expression of ECMP in a biological sample comprising the steps of:
- combining the biological sample with an antibody of claim 17, under conditions suitable for the antibody to bind the polypeptide and form an antibody: polypeptide complex; and
  - detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.
23. The antibody of claim 17, wherein the antibody is:
- a chimeric antibody;
  - a single chain antibody;
  - a Fab fragment;
  - a F(ab')<sub>2</sub> fragment; or
  - a humanized antibody.
24. A composition comprising an antibody of claim 17 and an acceptable excipient.
25. A method of diagnosing a condition or disease associated with the expression of ECMP in a subject, comprising administering to the subject an effective amount of the composition of claim 24.
26. A composition of claim 24, wherein the antibody is labeled.
27. A method of diagnosing a condition or disease associated with the expression of ECMP in a subject, comprising administering to the subject an effective amount of the composition of claim 26.
28. An isolated polynucleotide encoding a polypeptide of claim 1.
29. An isolated polynucleotide encoding a polypeptide of claim 2.
30. A recombinant polynucleotide comprising a promoter sequence operably linked to a

polynucleotide of claim 28.

31. A cell transformed with a recombinant polynucleotide of claim 30.

32. An isolated polynucleotide comprising a sequence selected from the group consisting of:

- a) a polynucleotide sequence of SEQ ID NO:2 and SEQ ID NO:4,
- b) a naturally-occurring polynucleotide sequence having at least 80% sequence identity to the sequence of SEQ ID NO:2 or SEQ ID NO:4,
- c) a polynucleotide sequence complementary to a),
- d) a polynucleotide sequence complementary to b) and
- e) a ribonucleotide equivalent of a)-d).

33. A polynucleotide of claim 32, comprising the polynucleotide sequence of SEQ ID NO:2.

34. A polynucleotide of claim 32, comprising the polynucleotide sequence of SEQ ID NO:4.

35. An isolated polynucleotide comprising at least 60 contiguous nucleic acids of claim 32.

36. A method for detecting a target polynucleotide in a sample, the target polynucleotide having a sequence of a polynucleotide of claim 32, the method comprising:

- a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to the target polynucleotide in the sample, and which probe specifically hybridizes to the target polynucleotide, under conditions whereby a hybridization complex is formed between the probe and the target polynucleotide or fragments thereof, and
- b) detecting the presence or absence of the hybridization complex, and, optionally, if present, the amount thereof.

37. A method of claim 36, wherein the probe comprises at least 60 contiguous nucleotides.

38. A method for detecting a target polynucleotide in a sample, the target polynucleotide having a sequence of a polynucleotide of claim 32, the method comprising:

- a) amplifying the target polynucleotide or fragment thereof using polymerase

chain reaction amplification, and

b) detecting the presence or absence of the amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

39. A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein the target polynucleotide comprises a polynucleotide sequence of claim 32, the method comprising:

a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,

b) detecting altered expression of the target polynucleotide, and

c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

40. A method for assessing toxicity of a test compound, the method comprising:

a) treating a biological sample containing nucleic acids with the test compound;

b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 32 under conditions whereby a specific hybridization complex is formed between the probe and a target polynucleotide in the biological sample, the target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 32 or fragment thereof;

c) quantifying the amount of hybridization complex; and

d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.